## § 179.102-4 Vinyl fluoride, stabilized.

Each tank used to transport vinyl fluoride, stabilized, must comply with the following special requirements:

- (a) All plates for the tank must be fabricated of material listed in paragraph (a)(2) of this section, and appurtenances must be fabricated of material listed in paragraph (a)(1) or (a)(2) of this section.
- (1) Stainless steel, ASTM A 240/A 240M (IBR, see §171.7 of this subchapter), Type 304, 304L, 316 or 316L, in which case impact tests are not required; or
- (2) Steel complying with ASTM Specification A 516 (IBR, see §171.7 of this subchapter); Grade 70; ASTM Specification A 537 (IBR, see §171.7 of this subchapter), Class 1; or AAR Specification TC 128, Grade B, in which case impact tests must be performed as follows:
- (i) ASTM A 516/A 516M and A 537/A 537M material must meet the Charpy V-Notch test requirements, in longitudinal direction of rolling, of ASTM A 20M (IBR, see §171.7 of this subchapter).
- (ii) AAR Specification TC 128 material must meet the Charpy V-Notch test requirements, in longitudinal direction of rolling, of 15 ft.-lb. minimum average for 3 specimens, with a 10 ft.-lb. minimum for any one specimen, at minus 50 °F or colder, in accordance with ASTM A 370 (IBR, see §171.7 of this subchapter).
- (iii) Production welded test plates must—
- (A) Be prepared in accordance with AAR Specifications for Tank Cars, appendix W, W4.00 (IBR, see §171.7 of this subchapter);
- (B) Include impact specimens of weld metal and heat affected zone prepared and tested in accordance with AAR Specifications for Tank Cars, appendix W, W9.00; and
- (C) Meet the same impact requirements as the plate material.
- (b) Insulation must be of approved material.
- (c) Excess flow valves must be installed under all liquid and vapor valves, except safety relief valves.
- (d) A thermometer well may be installed.
- (e) Only an approved gaging device may be installed.

- (f) A pressure gage may be installed.
- (g) Aluminum, copper, silver, zinc, or an alloy containing any of these metals may not be used in the tank construction, or in fittings in contact with the lading
- (h) The jacket must be stenciled, adjacent to the water capacity stencil,

## MINIMUM OPERATING TEMPERATURE °F.

(i) The tank car and insulation must be designed to prevent the vapor pressure of the lading from increasing from the pressure at the maximum allowable filling density to the start-to-discharge pressure of the reclosing pressure relief valve within 30 days, at an ambient temperature of 90 °F.

[Amdt. 179–32, 48 FR 27707, June 16, 1983, as amended at 49 FR 24317, June 12, 1984; 49 FR 42736, Oct. 24, 1984; Amdt. 179–45, 55 FR 52728, Dec. 21, 1990; Amdt. 179–52, 61 FR 28680, June 5, 1996; 65 FR 58632, Sept. 29, 2000; 66 FR 33452, June 21, 2001; 66 FR 45186, 45390, Aug. 28, 2001; 67 FR 51660, Aug. 8, 2002; 68 FR 75758, 75760 Dec. 31, 2003]

## § 179.102-17 Hydrogen chloride, refrigerated liquid.

Each tank car used to transport hydrogen chloride, refrigerated liquid must comply with the following special requirements:

- (a) The tank car must comply with Specification DOT-105J600W and be designed for loading at minus 50 °F. or colder.
- (b) All plates for the tank must be fabricated of material listed in paragraph (b)(2) of this section, and appurtenances must be fabricated of material listed in paragraph (b)(1) or (b)(2) of this section.
- (1) Stainless steel, ASTM A 240/A 240M (IBR, see §171.7 of this subchapter), Type 304, 304L, 316, or 316L, in which case impact tests are not required: or
- (2) Steel conforming to ASTM A 516/A 516M (IBR, see §171.7 of this subchapter), Grade 70; ASTM A 537/A 537M, (IBR, see §171.7 of this subchapter) Class 1; or AAR Specification TC 128, Grade B in which case impact tests must be performed as follows:
- (i) ASTM A 516/A 516M and A 537/A 537M material must meet the Charpy V-notch test requirements, in longitudinal direction of rolling, of ASTM A